

REMARKS/ARGUMENTS

Claims 1-26 are pending in the application; reexamination and reconsideration are hereby requested.

Claims 1-26 were rejected as unpatentable over Fig.2 in view of any of Verhaeghe, Rapp, or Jung. The Examiner pointed to the MOS capacitors of Verhaeghe, Rapp, and Jung as making obvious the substitution of a MOS capacitor for poly capacitor 20 of Fig.2.

Applicants reply that a simple substitution of capacitor types is not obvious. For example, Verhaeghe replaces capacitor 14 of his prior art Fig.1 with two MOS capacitors 40 and 42 of opposite type in his Fig.4A because of the problem of voltage dependence of the capacitance; see column 3, lines 24-29. That is, Verhaeghe avoids a simple substitution with a MOS capacitor. Similarly, application page 12 at the top notes that voltage dependency of C_{INT} would lead to poor linearity of the amplifier, so C_{INT} cannot be replaced by a MOS capacitor and makes clear the nonobviousness of the MOS capacitor C_C on the same chip. Indeed, applicants' invention includes the realization that the non-linear noise character of the CT scanner photodiode signals allows for the use of non-linear compensation capacitors in the integrators leading to tolerable non-linear integrator noise; see application Fig.6.

Claims 12 and 16-17 were rejected as indefinite; the Examiner cited a lack of a drawing for the plurality of ADCs.

Applicants reply that Fig.1 shows the plurality of ADCs; recall that the claim 12 CT scanner data acquisition system has the same overall structure as that of Fig.1.

The drawings were objected to as not showing the plurality of ADCs of claim 12.

Applicants reply that Fig.1 shows the plurality of ADCs.

Respectfully submitted,

/Carlton H. Hoel/

Carlton H. Hoel
Reg. No. 29,934
Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, Texas 75265
972.917.4365